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10/767,446	01/29/2004	Deborah Lewandowski Barclay	LUC-455/Barclay 7-52-6-7-	6451

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EXAMINER	
HUYNH, CHUCK	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/767,446	BARCLAY ET AL.	
	Examiner	Art Unit	
	Chuck Huynh	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 15 and 20 are amended.

1. Claims 21-22 are new.

Response to Arguments

1. Applicant's arguments filed 1/5/2006 have been fully considered but they are not persuasive.

Regarding pending claims 1-22, Applicant argues that Harrison in view of Vishwanathan does not disclose the limitation of the mobile switching component that performs the barge-in that allows the first user to communicate with the second use of the mobile device that is engaged in the preexisting call as recited in applicants independent claim 1 and now similarly recited in claims 15 and 20.

Examiner respectfully disagrees. Harrison discloses a barge-in procedure consisting of party A, B and C (Figs. 1-3). While parties A and B are in an active phone call, party C initiates a barge-in request to party B. After verification of Barge-In service, party C is connected, by the switching component B, into a conference connection (Col 6, lines 13-30).

Harrison discloses all the particulars of the claim except that the switch is a mobile switching component controlling mobile communication devices. Therefore, Vishwanathan is combined to disclose a mobile switching component (MSC), which is used to provide group/conference calls among mobile communication devices, as well as having barge-in service capability (Page 4, [0050]+; Fig. 7; Page 6, [0071]; Page 9, [0115]). Even though, Harrison's system is used within the PSTN (Harrison: Fig. 2), and it would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's mobile network with the PSTN to establish communication and connectivity (Vishwanathan: Fig. 7, no. 1070; Page 1, [0005], [0009]; Page 10, [0116]).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 6-10, 12-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Vishwanathan et al. (hereinafter Vishwanathan).

Regarding claim 1, Harrison discloses an apparatus, comprising:

a switching component that performs a barge-in that allows a first user to communicate with a second user of a mobile communication device that is engaged in a pre-existing active call (Col 5, lines 48-59; Figs. 1 and 2).

Harrison discloses all the particulars of the claim except for a mobile switching component.

However, Vishwanathan does disclose a mobile switching component (MSC) within an analogous art (Fig. 1, 2).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's disclosure to expand the system to a mobile network and provide communication for mobile users.

Regarding claims 2, Harrison discloses the apparatus of claim 1, wherein the mobile switching component communicates one or more indications (waiting tones) of the barge-in to the second user of the mobile communication device (Col 5, lines 48-59).

Regarding claim 3, Harrison discloses the apparatus of claim 2, wherein the one or more indications comprise one or more in-band indications of the barge-in, wherein the mobile switching component cooperates with the mobile communication device to communicate the one or more in-band indications (voice channel or audio waiting tone) of the barge-in to the second user of the mobile communication device (Col 8, lines 1-6).

Regarding claim 4, Harrison discloses the apparatus of claim 2, wherein the one or more indications comprise one or more out-of-band indications of the barge-in, wherein the mobile switching component cooperates with the mobile communication device to communicate the one or more out-of- band indications (data channel/messages) of the barge-in to the second user of the mobile communication device (Col 11, lines 24-36).

Regarding claim 6, Harrison discloses the apparatus of claim 1, wherein the preexisting active call comprises a preexisting active call between the mobile communication device and one or more additional communication devices (Col 5, lines 48-59);

wherein the mobile switching component performs the barge-in to allow the first user to participate in the preexisting active call between the mobile communication device and the one or more additional communication devices (conference call) (Col 8, lines 1-6).

Regarding claim 7, Harrison discloses the apparatus of claim 6, wherein the mobile switching component communicates one or more indications of the barge-in to the one or more additional communication devices (Col 8, lines 1-6).

Regarding claim 8, Harrison discloses the apparatus of claim 6, wherein the mobile switching component communicates one or more indications of the barge-in to the mobile communication device and the one or more additional communication devices (Col 8, lines 1-6).

Regarding claims 9, Harrison discloses the apparatus of claim 6, wherein the mobile switching component places one or more of the one or more additional communication devices on hold for a duration of the barge-in (Col 6, lines 36-37; Col 8, lines 9-12).

Regarding claim 10, Harrison discloses the apparatus of claim 1, wherein the mobile switching component receives an authorization code from the first user;

wherein the mobile switching component employs the authorization code from the first user to perform the barge-in (Col 7, lines 34 – Col 8, lines 1-12).

Regarding claim 12, Harrison discloses the apparatus of claim 1, wherein the mobile switching component employs one or more priority user designations from the second user to perform a determination that the first user is a priority user (this is done with a password) (if the caller knows the password, then the caller is of priority) (Col 7, lines 56-67);

wherein upon the determination that the first user is a priority user, the mobile switching component performs the barge-in to allow the priority user to communicate with the second user (Col 7, lines 56 – Col 8, lines 1-6).

Regarding claim 13, Harrison discloses the apparatus of claim 1 , wherein the mobile switching component receives a request to perform the barge-in from an operator that acts on behalf of the first user (Col 1, lines 6-35);

wherein the mobile switching component employs the request to perform the barge-in to allow the first user to communicate with the second user (Col 7, lines 65 – Col 8, lines 1-6).

Regarding claim 14, Vishwanathan discloses the apparatus of claim 1, wherein the mobile switching component (Fig. 1) comprises:

a home mobile switching center for the mobile communication device, wherein the home mobile switching center receives a request for the barge-in (Page 1, [0005]; Page 6, [0071]), the apparatus further comprising:

a visited mobile switching center for the mobile communication device (Page 1, [0005]);

wherein the home mobile switching center identifies the visited mobile switching center through employment of the home location register (Fig. 1);

wherein the home mobile switching center and the visited mobile switching center cooperate to perform the barge-in to allow the first user to participate in the

preexisting active call with the second user of the mobile communication device (Page 6, [0071]).

Regarding claim 15, Harrison discloses a method, comprising the step of:

performing a barge-in through employment of a mobile switching component that allows a first user to communicate with a second user that is engaged in a preexisting active call (Col 5, lines 47-59).

Harrison discloses all the particulars of the claim except the second user being a mobile device.

However, Vishwanathan disclose a wireless network with mobile stations using a barge-in function for communication (Page 6, [0071]; Fig. 1; Fig. 7, no. 1070; Page 1, [0005], [0009]; Page 10, [0116]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's mobile network with the PSTN to establish communication and connectivity (Vishwanathan: Fig. 7, no. 1070; Page 1, [0005], [0009]; Page 10, [0116]).

Regarding claim 16, Harrison discloses the method of claim 15, wherein the step of performing the barge-in that allows the first user to communicate with the second user of the mobile communication device that is engaged in the preexisting active call comprises the steps of:

determining that the first user is a priority user (if the caller knows the password, then the caller is of priority) (Col 7, lines 56-67); and

bridging a call leg of the priority user with a call leg of the second user (Abstract; Col 6, lines 51-60).

Regarding claim 17, Harrison discloses the method of claim 16, further comprising the step of:

wherein the step of bridging the call leg of the priority user with the call leg of the second user (Col 6, lines 51-60) comprises the step of:

cooperating with a switch to bridge the call leg of the priority user with the call leg of the second user (Col 7, lines 65 – Col 8, lines 1-12).

Harrison discloses all the particulars of the claim except a switch being a visited mobile switching center; and

identifying a visited mobile switching center that is synchronized with the mobile communication device through employment of a home location register;

However, Vishwanathan dose disclose a switch being a visited mobile switching center (Fig. 1) and identifying a visited mobile switching center that is synchronized with the mobile communication device through employment of a home location register (Fig. 1);

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's disclosure to expand the system to a mobile network and provide communication for mobile users.

Regarding claim 18, Harrison discloses the method of claim 15, further comprising the step of:

communicating one or more indications of the barge-in to the mobile communication device (Col 5, lines 48-59).

Regarding claim 19, Harrison discloses the method of claim 15, wherein the preexisting active call comprises a preexisting active call between the mobile communication device and one or more additional communication devices, the method further comprising the step of:

placing one or more of the one or more additional communication devices on hold for a duration of the barge-in (Col 6, lines 36-37; Col 8, lines 9-12).

Regarding claim 20, Harrison discloses an article comprising:

one or more computer-readable signal-bearing media (data storage within the telephone system apparatus to store data for use in verification process Col 1, lines 44+, Col 7, lines 56+); and

means in the one or more media for performing a barge-in through employment of a mobile switching component to allow a first user to participate in a preexisting active call with a second user of a mobile communication device (Col 5, lines 47-59).

Harrison discloses all the particulars of the claim except the second user being a mobile device.

However, Vishwanathan disclose a wireless network with mobile stations using a barge-in function for communication (Page 6, [0071]; Fig. 1; Fig. 7, no. 1070; Page 1, [0005], [0009]; Page 10, [0116]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's mobile network with the PSTN to establish communication and connectivity (Vishwanathan: Fig. 7, no. 1070; Page 1, [0005], [0009]; Page 10, [0116]).

Regarding claim 21, Harrison discloses the method of claim 15, wherein the step of performing the barge-in through employment of the mobile switching component that allows the first user to communicate with the second user of the mobile communication device that is engaged in the preexisting active call comprises the steps of:

receiving a call request from the first user, wherein the call request comprise an operator services information parameter that indicates that the first user is a priority user (Col 1, lines 19+Col 1, lines 37-67);

determining a mobile identification number of the mobile communication device (Col 1, lines 37-67);

requesting from a home location register a location of and/or route to the mobile communication device through employment of the mobile identification number (Col 1, lines 37-67; Col 2, lines 19-32);

bridging a call leg of the priority user with a call leg of the second user (Col 6, lines 55+);

sending a confirmation message of the bridging of the call legs to the priority user (Col 8, lines 1-6; Col 9, lines18+).

Harrison discloses all the particulars of the claim except for the limitations of receiving a temporary local directory number from the home location register (Page 9, [0115]).

However, Vishwanathan does disclose receiving a temporary local directory number (TLDN) from the home location register (Page 9, [0115]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's mobile network with the PSTN to establish communication and connectivity (Vishwanathan: Fig. 7, no. 1070; Page 1, [0005], [0009]; Page 10, [0116]).

Regarding claim 22, Harrison discloses the method of claim 21, wherein the step of bridging the call leg of the priority user with the call leg of the second user comprises the step of:

forwarding the confirmation of the call request to the priority user (Col 9, lines 18+);

wherein the step of sending the confirmation message of the bridging of the call legs to the priority user comprises the steps of:

receiving a confirmation of the bridging of the call leg of the priority user with the call leg of the second user (Col 8, lines 5+);

forwarding the confirmation of the bridging to the priority user (Col 9, lines 18+).

Harrison does disclose the limitation of receiving a confirmation of the call request from another switch within the system (Col 6, lines 55+; Col 9, lines 18+), but not from a visited mobile switching center; furthermore, Harrison is unclear about the limitation of sending a call request to a visited mobile switching center, wherein the call request comprises the temporary local directory number, wherein the visited mobile switching center performs the bridging of the call leg of the priority user with the call leg of the second user.

However, Vishwanathan discloses roaming services incorporating mobile switching centers (home MSC and serving/visiting MSC Page 1, [0005], [0012]) and furthermore, discloses sending a call request to a visited mobile switching center, wherein the call request comprises the temporary local directory number, wherein the visited mobile switching center performs the bridging of the call leg of the priority user with the call leg of the second user (Page 9, [0113] – [0115]). Therefore, Vishwanathan is combined to disclose a mobile switching component (MSC), which is used to provide group/conference calls among mobile communication devices, as well as having barge-in service capability (Page 4, [0050]+; Fig. 7; Page 6, [0071]; Page 9, [0115]). Even though Harrison's system is used within the PSTN (Harrison: Fig. 2), and it would have

been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's mobile/roaming network with the PSTN to establish communication and connectivity (Vishwanathan: Fig. 7, no. 1070; Page 1, [0005], [0009]; Page 10, [0116]).

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Perry.

Regarding claim 11, Harrison discloses all the particulars of the claim and even though it is well known in the art that a code can consist of one or more digit patterns, Harrison suggests in Col. 11, lines 51-63 that a (calling party number information which suggests ISUP) but does not explicitly disclose the apparatus of claim 10, wherein the authorization code comprises one or more of:

one or more integrated services digital network user part (ISUP) messages.

However, Perry does disclose the usage of ISUP within a barge-in system (Page 4, [0038]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Perry's disclosure of ISUP to provide access for communication to an intended party.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Bales et al (hereinafter Bales).

Regarding claim 5, Harrison discloses the apparatus of claim 2, wherein the one or more indications comprise an entry indication and an exit indication, wherein the mobile switching component cooperates with the mobile communication device to communicate the entry indication to the second user upon a start of the barge-in (Col 8, lines 1-6).

Even though Harrison discloses all the particulars of the claim, Harrison does not disclose wherein the mobile switching component cooperates with the mobile communication device to communicate the exit indication to the second user of the mobile communication device upon an end of the barge-in.

However, Bales does disclose sending a notification message to users, informing of the end of call conference. At the start of the barge-in the users were in a conference call state and when a particular terminal is not in the conference state, hence the end of the barge-in, other users are notified (Col 20, lines 48-65).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Bales' disclosure to provide better of conference communication state and to keep users informed of the communication status.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Huynh whose telephone number is 571-272-7866. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chuck Huynh

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